PATENT

- 1 -

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	:	Before the Examiner:
Achtermann et al.	:	Todd, Gregory
Serial No.: 09/438,436	:	Group Art Unit: 2157
Filed: November 12, 1999	:	
	:	IBM Corporation
Title: AN APPARATUS FOR	:	Intellectual Property Law
CONNECTION MANAGEMENT	:	11400 Burnet Road
AND THE METHOD THEREFOR	:	Austin, Texas 78758

RECEIVED

DEC 0 3 2003

Technology Center 2100

SECOND REPLY UNDER 37 C.F.R. § 1.111

Mail Stop Non-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action having a mailing date of September 30, 2003 (Paper No. 10), having a three-month shortened statutory period for response set to expire on December 30, 2003, please reconsider the rejections of the claims in view of the following remarks:

CERTIFICATION UNDER 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November 25, 2003.

_____
Signature

Toni Stanley
(Printed name of person certifying)

Claims 1-33 are pending in the Application

Claims 1-33 stand rejected.

I.   PREMATURITY OF FINAL REJECTION

The finality of the rejection set in the instant Office Action, Paper No. 10, is premature. As discussed below, claims 4, 15 and 26 have been rejected over a combination of references (*Williams*, U.S. Patent No. 6,411,982 and *Sullivan*, U.S. Patent No. 6,032,193) in response to the Applicants traversal of a taking of Official Notice in the prior Office Action, Paper No. 7. (*See* Paper No. 6, page 6; Applicants' Reply Under 37 C.F.R. § 1.111, mailed June 19, 2003, page 20.) In responding to an Applicant's traversal of a taking of Official Notice, the Examiner may not make the rejection final unless the reference added directly corresponds to the alleged common knowledge. MPEP § 2144.03(D). Where, as discussed hereinbelow, new issues are raised, the Office Action may not be made final. *Id.*

The same objection to the finality of the rejection is raised by the response to the taking of Official Notice with respect to claims 6, 17 and 28. (*See* Paper No. 6, pages 6-7.) The application of *Threlkeld*, U.S. Patent No. 6,502,121 does not directly correspond to the alleged common knowledge, and raises new issues, to which the Applicants should be given a fair opportunity to respond.

The Applicants' attorney and Examiner Todd discussed this issue in telephonic interviews on November 24, 2003. The Applicants pointed out that a comparison of the statements taking Official Notice Paper No. 6 and the Examiner's assertions as to the teachings of references not relied upon to support the Official Notice are markedly different. Thus, the application of the references in rejecting claims 4, 15 and 26 , and claims 6, 17 and 28, respectively, demonstrate that the references added do not directly correspond to the alleged common knowledge. Examiner Todd responded that he was "interpreting" the references. Thus, the Examiner's own statements refute any contention that the references added directly correspond to the common

knowledge. Moreover, "interpretation" of the references to support a taking of Official Notice plainly raises new issues.

The finality of rejection of claims set in Paper No. 10 is improper. Accordingly, the Applicants have filed this paper under 37 C.F.R § 1.111.

II.   EXAMINER INTERVIEW SUMMARY

The Applicants and Applicants attorney appreciate the opportunity to discuss the application in a telephonic interview with Examiner Todd on November 6, 2003. The Applicants and Examiner Todd discussed the response to the Applicants' arguments with respect to the callback method. The Applicants and Examiner Todd also discussed the Application of *In re Casey* and *In re Otto*, also relied upon in the Examiner's response. The substance of the discussion will be addressed herein below in conjunction with the Applicants reply to the Examiner's response to the Applicants' arguments advanced in the Applicants' Reply under 37 C.F.R. § 1.111 mailed on June 19, 2003.

The Applicants and Applicants' attorney also thank Examiner Todd for his efforts in examining the application.

III.   REJECTION UNDER 35 U.S.C. § 102(e):

The Examiner has rejected claims 1-3, 5, 12-14, 16, 23-25 and 27 under 35 U.S.C. § 102(e) as being anticipated by *Williams* (U.S. Patent No. 6,411,982). Applicants respectfully traverse these rejections for at least the reasons stated below and respectfully request the Examiner to reconsider and withdraw these rejections.

For a claim to be anticipated under 35 U.S.C. § 102, each and every claim limitation must be found in the cited prior art reference and arranged as required by the claim. MPEP § 2131.

3

Claim 1 is directed to a connection scheduling method. The method includes determining if a job is available for scheduling, and determining, in response to the step of determining if the job is available, if a session is available. The session is included in a pool of sessions, the pool of sessions having a preselected one of a set of priority levels corresponding to a priority level of the job and wherein the session effects an execution of the job. The method further includes launching the session to effect the execution of the job, if the session is available.

Williams does not disclose "determining, in response to said step of determining if said job is available, if a session is available, wherein said *session is included in a pool of sessions*, said pool of sessions having a preselected one of a set of priority levels corresponding to a priority level of said job and wherein said session effects an execution of said job" as recited in claim 1 and similarly in claims 12 and 23. The Examiner directs Applicants' attention to column 2, line 58 through column 3, line 2 and column 3, lines 10-26 of *Williams* as disclosing the above-cited claim limitation. (Paper No. 6, page 5; Paper No. 10, page 3.) This teaching in *Williams* states: thus, tasks are transferred from Priority-Ordered queue 108 to In-Service queue 110 on a first-in first-out (FIFO) basis. Service manager 102 manages an In-Service queue 110. In-Service queue includes n execution entries, where n is the pre-specified maximum number of scheduled tasks that are allowed to be executed concurrently. When any execution entry in In-Service queue is empty (i.e., becomes available), service manager 102 transfers the highest priority (in the preferred embodiment, priority is time-ordered) task request from priority-ordered queue to the available execution entry in In-Service queue, and execution of the task request commences. (*Williams*, column 2, line 58 to column 3, line 2.)

Thus, *Williams* discloses scheduling task requests in a priority-order queue if the task requests are to be scheduled within a pre-specified time interval. *Williams* further discloses that when an execution entry in an In-Service queue is empty, the highest priority task request in the priority-order queue may be transferred to the In-

Service queue. However, this language does not disclose determining if a session is available. Further, this language does not disclose determining if a session is available in response to determining if a job is available. Further, this language does not disclose, at least, a session included in a pool of sessions having a preselected one of a set of priority levels corresponding to a priority level of a job. Instead, *Williams* only discloses scheduling task requests in a priority-order queue in sorted time order. Further, this language does not disclose where the session effects an execution of the job. Thus, *Williams* does not disclose all the limitations of claims 1, 12 and 23, and thus *Williams* does not anticipate claims 1, 12 and 23. MPEP § 2131.

Williams also does not disclose "launching said session to effect said execution of said job, if said session is available" as recited in claim 1 and similarly in claims 12 and 23. The Examiner directs Applicants' attention to column 3, lines 19-32 of *Williams* as disclosing the above-cited claim limitation. (Paper No. 6, page 5, Paper No. 10, page 3.) This disclosure in *Williams* states: once an available execution entry is discovered, the highest priority task request from priority-ordered queue is transferred to the available execution entry in In-Service queue in step 208. This is contingent on its next time due being less than or equal to the current time. In the preferred embodiment, the priority of a task request is measured in terms of time. In step 210, execution of the task request commences. Steps 202 through 210 are repeated continuously. (*Williams*, column 3, lines 19-32.)

When a task request completes execution, as determined in step 212, it is removed from the In-Service queue in step 214. It is determined in step 216 whether its next execution time exceeds the pre-specified time interval. (*Williams*, column 3, lines 19-32.)

Thus, *Williams* discloses transferring the highest priority task request from a priority-ordered queue to the In-Service queue if an available execution entry is discovered in the In-Service queue. *Williams* further discloses that when a task request completes execution it is removed from the In-Service queue. This language

5

does not disclose launching a session. The In-Service queue entries are not taught to be "launchable." They are "slots" for holding task requests that may be executed concurrently. (*Williams*, column 2, lines 61-63.) Necessarily, this language does not disclose launching the session to effect the execution of the job. Further, this language does not disclose launching the session to effect the execution of the job if the session is available. Thus, *Williams* does not disclose all the limitations of claims 1, 12 and 23, and thus *Williams* does not anticipate claims 1, 12 and 23. MPEP § 2131.

For at least the above reasons, claims 1, 12 and 23 are not anticipated by *Williams*. Claims 2-3, 5, 13-14, 16, 24-25 and 27 each recite combinations of features including the above combinations, and thus are not anticipated for at least the above reasons as well. Claims 2-3, 5, 13-14, 16, 24-25 and 27 recite additional features, which, in combination with the features of the claims upon which they depend, are not anticipated by *Williams*.

For example, *Williams* does not disclose "wherein said session comprises a thread" as recited in claims 2, 13 and 24. The Examiner directs Applicants' attention to column 1, lines 47-54 and column 4, lines 21-25 of *Williams* as disclosing the above-cited claim limitation. Paper No. 6, page 5; Paper No. 10, page 3.) Rather, *Williams* states: the present invention is a thread-based scheduling governor that regulates the number of scheduled tasks that are executed concurrently. The schedule governor of the invention is implemented using threads. In the system of the invention, a task goes through a lifecycle. In infant form, it is given a slot on the file system as a "request file"; it graduates from "in-file" form to "in-memory" form, where it is maintained as an idle thread in a priority-ordered queue. (*Williams*, column 1, lines 47-54).

Scheduler 502 is the starting point for DispatcherQuery 508 navigation. As DispatcherClient 506 objects make method calls on method server_socket of Scheduler 502, they are serviced by DispatchedThread 510 to perform the actual

query in a thread within Scheduler 502. (*Williams*, column 4, lines 21-25.) Thus, *Williams* discloses using threads to schedule task requests. While this language discloses threads, this language does not disclose a <u>session</u> comprising a thread. Thus, *Williams* does not disclose all the limitations of claims 2, 13 and 24, and thus *Williams* does not anticipate claims 2, 13 and 24. MPEP § 2131.

Williams also does not disclose "creating a connection to a target system for said execution of said job" as recited in claim 3 and similarly in claims 14 and 25. The Examiner directs Applicants' attention to Figure 5 and column 4, lines 21-37 of *Williams* as disclosing the above-cited claim limitation. (Paper No. 6, page 5, Paper No. 10, Page 3.) *Williams* states: Scheduler 502 is the starting point for DispatcherQuery 508 navigation. As DispatcherClient 506 objects make method calls on method server_socket of Scheduler 502, they are serviced by DispatchedThread 510 to perform the actual query in a thread within Scheduler 502. DispatcherClients 506 are able to obtain information as to the socket address port of their Scheduler 502, send it a class name and arguments to load a DispatcherQuery 508 on the server side, and wait for the results to come back through the standard output "stdout". *Williams* further discloses that DispatcherThreads 510 provides a thread of execution for each DispatcherQueries 508 to perform their work within the process space for Scheduler 502. Dispatcher Thread 510 is itself an instance of DispatcherQuery 508, but is unique in the sense that it represents the head of the query. DispatcherQuery 508 is a query to be performed on Scheduler 502 identified to it through the DispatcherThread 510. (*Williams*, column 4, lines 21-37.)

Thus, *Williams* discloses providing a thread to query for a task request. However, this language does not disclose session comprising thread or a target system. Further, this language does not disclose creating a connection to the target system. Neither does this language disclose creating a connection to a target system for the execution of the job. Thus, *Williams* does not disclose all the limitations of

7

claims 3, 14 and 25, and thus *Williams* does not anticipate claims 3, 14 and 25. MPEP § 2131.

Williams also does not disclose "launching an error-handling thread in response to an error condition, said error-handling thread releasing said session" as recited in claim 5 and similarly in claims 16 and 27. The Examiner directs Applicants' attention to column 3, lines 29-37 of *Williams* as disclosing the above-cited claim limitation. (Paper No. 6, page 5, Paper No. 10, page 3.) *Williams* states: when a task request completes execution, as determined in step 212, it is removed from the In-Service queue in step 214. It is determined in step 216 whether its next execution time exceeds the pre-specified time interval. If its next execution time does not exceed the pre-specified time interval, the task request is re-entered into priority-ordered queue in sorted position in step 204, and the cycle is repeated. If its next execution time does exceed the pre-specified time interval, the task request is discharged from memory in step 220. (*Williams*, column 3, lines 29-37.)

Thus, *Williams* discloses determining whether the task request's next execution time exceeds the pre-specified time interval. *Williams* further discloses that if the task request's next execution time does not exceed the pre-specified time interval, the task request is re-entered into priority-ordered queue in sorted position. *Williams* further discloses that if the task request's next execution time does exceed the pre-specified time interval, the task request is discharged from memory. This language does not disclose launching an error-handling thread. Further, this language does not disclose launching an error-handling thread in response to an error condition. Further, this language does not disclose an error condition. Further, this language does not disclose the error-handling thread releasing the session. Thus, *Williams* does not disclose all the limitations of claims 5, 16 and 27, and thus *Williams* does not anticipate claims 5, 16 and 27. MPEP § 2131.

As a result of the foregoing, Applicants respectfully assert that not each and every claim limitation was found with *Williams*, and thus claims 1-3, 5, 12-14, 16, 23-25 and 27 are not anticipated by *Williams*.

IV.   REJECTION UNDER 35 U.S.C. § 103

Claims 4, 15 and 26 have been rejected under 35 U.S.C. § 103 as being unpatentable over *Williams* in view of *Sullivan*, U.S. Patent No. 6,032,193. The Applicants respectfully traverse the rejection of claims 4, 15 and 26 under 35 U.S.C. § 103.

Claim 4 is directed to the method of claim 3 and further including determining if said connection is an existing connection, and wherein said step of creating the connection is performed if said connection is not an existing connection. Claims 15 and 26 are respectively directed to a data processing system and computer program product that include circuitry and programming instructions paralleling the method steps of claim 4. The Examiner admits that *Williams* does not teach the limitations of claim 4. (Paper No. 10, page 4.) The Examiner looks to *Sullivan* to cure the omissions in *Williams*. (*Id.*) Note that the Examiner relies on *Sullivan* in response to the Applicants' traversal of a taking of Official Notice in Paper No. 6. (*See* Paper No. 10, page 9.) Only the express limitations of claims 4, 15 and 26 are considered; the limitations incorporated in these claims through their respective dependencies have been addressed above.

The Examiner asserts that *Sullivan* "discloses if a connection is not being made, assuming a connection is already established for a network connection." (*Id.*) (citing *Sullivan*, col. 8, lines 40-57). As an initial matter, this assertion demonstrates that *Sullivan* is not introduced as directly corresponding evidence of the common knowledge previously alleged. (*See* Paper No. 6, page 6) (stating that "a connection will be created if it is not already connected.") Thus, the Examiner's reliance on *Sullivan* raises new issues. Moreover, claims 4, 15 and 26 do not recite an operation

of assuming a connection is already established. Thus, the Examiners allegation does not address the limitation of claim 4. Moreover, *Sullivan* is directed to a computer network interface for distributing data over multiple physical links to increase transmission bandwidth. (*Sullivan*, col. 1, lines 9-11.) *Sullivan* discloses, in particular, that when the IP stack in a computer wishes to send an outbound packet to the remote network, if the packet is recognized as a connection establishment packet it allocates a record in a table to remember the physical link (*i.e.* modem) to which the connection is assigned. (*Sullivan*, col. 8, lines 1-18.) Conversely, if the packet is not a connection establishment packet, the computer assumes that the connection is already established and that a table entry has already been created for the connection. (*Sullivan*, col. 8, lines 1-18.) Plainly, the teaching relied upon by the Examiner does not disclose determining if a connection is an existing connection, and creating the connection if it is not an existing connection. Consequently, neither *Williams*, *Sullivan* or the combination thereof teach or suggest all of the limitations of claims 4, 15 and 26.

The Examiner also contends that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Sullivan's use of creating a connection only when not already connected because it would be redundant to connect while already being connected. Again the allegations do not address the limitation of claims 4, 15 and 26. The claims recite determining if a connection is an existing connection. Moreover, the Examiner's motivation does not address why it would be desirable to modify *Williams* to incorporate connections in the first instance. This deficiency exemplifies the requirement that a motivation or suggestion to combine references must be found in objective evidence arising in the references themselves, the nature of the problem to be solved, or the knowledge of persons of ordinary skill in the art. *See* MPEP § 2143.01.

Thus, for at least the aforesaid reasons, a *prima facie* showing of obviousness has not been made with respect to claims 4, 15 and 26. Consequently, claims 4, 15 and 26 are allowable under 35 U.S.C. § 103 over *Williams* and *Sullivan*.

V.   REJECTION UNDER 35 U.S.C. § 103

Claims, 6-9, 17-20, 26 and 28-31 have been rejected under 35 U.S.C. § 103 as being unpatentable over *Williams* in view of *Threlkeld*, U.S. Patent No. 6,502,121. The Applicants respectfully traverse the rejections of claims, 6-9, 17-20, 26 and 28-31 have been rejected under 35 U.S.C. § 103.

Claim 6 is directed to the method of claim 5 and further including changing value of a job state from a first value to a second value in response to the launching of the error handling thread. Claims 17 and 28 are respectively directed to a data processing system and computer program product that include circuitry and programming instructions paralleling the method steps of claim 6. The Examiner admits that *Williams* does not teach the limitation of claims 6, 17 and 28. (Paper No. 10, page 4.) The Examiner looks to *Threlkeld* to cure the omissions in *Williams*. (*Id.*) Note that the Examiner relies on *Threlkeld* in response to the Applicants' traversal of the taking of Official Notice in Paper No. 6. (*See* Paper No. 10, page 9.) The Examiner asserts that *Threlkeld* discloses the use of signaling a job status resulting in error via an error message being set from a first value to a new value. (Paper No. 10, page 4) (citing *Threlkeld*, col. 8, lines 15-49). As an initial matter, this assertion demonstrates that *Threlkeld* is not introduced as directly corresponding evidence of the common knowledge previously alleged. (*See* Paper No. 6, pages 6-7) (stating that the "value" of a job state changes when the task is discharged from memory). Thus, the Examiner's reliance on *Threlkeld* raises new issues.

These assertions fail. As an initial matter, the Examiner's assertion does not address the limitations of claims 6, 17 and 28. There is no allegation nor is there a teaching that the job status is signaled in response to a launching of an error handling

thread. All words in the claim must be considering when judging the patentability of the claim. MPEP § 2143.03. Moreover, the Examiner's characterization of the teaching in *Threlkeld* is incorrect. There is no error message that is set from a first value to a second value. *Threlkeld* teaches that when a fetch operation (of a job) is successful, a job status is fetched, and if the status indicates that the job has ended, it is removed from a job list. (*Threlkeld*, col. 8, lines 15-18.) Conversely, if the job has not ended, a determination is made whether is has run too long, and if so, the job is removed from the list. (*Threlkeld*, col. 8, lines 18-23.) Upon a job being removed from the list, a determination is made whether the job ended in error, and if so whether the job can be relaunched. (*Threlkeld*, col. 8, lines 23-39.) If the job cannot be relaunched, an error message is set. (*Threlkeld*, col. 8, lines 40-41.) This teaching of a error message by *Threlkeld* does not disclose setting of an error message from a first value to a second value. There is no error message if there is no error. This also shows that the job status as taught by *Threlkeld* does not teach a job state as recited in the claims. The job status in *Threlkeld* is "ended." (*Threlkeld*, col. 8, lines 31-33 and FIGS. 7A and 7B) (showing that block 721 is reached by the "Yes" branch of decision block 710). The job status is not changed whether the job ended in error or normally. Thus, neither *Williams, Threlkeld* or the combination thereof teach or suggest all of the limitations of claims 6, 17 and 28.

With respect to a motivation for combining references, the Examiner contends that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of having a value being changed when an error occurs as *Threlkeld* discloses as *Williams* discloses the task being discharged from memory and no longer therefore pending and the use of an error message being set would allow further clarification as to what error exactly happened as this would prevent future errors of the same kind since the particular error could be debugged and because this could enhance visibility of the exact status of the requested task. This motivation is not to be found in any objective evidence, but is a broad conclusory statement regarding the teachings of the references. Therefore, it is not

evidence. *In re Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433-34 (Fed. Cir. 2002); *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000); *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1616-17 (Fed. Cir. 1999). Moreover, the teaching in *Williams* to which the Examiner refers has nothing to do with an error. The task is discharged from memory after completion if the next time it is scheduled to be executed is longer than the time interval for which the service manager is accepting task requests. (*Williams*, col. 8, lines 10-37.) The motivation or suggestion must be found in the references themselves, the knowledge of persons of ordinary skill in the art, or the nature of the problem to be solved. MPEP § 2143.01 The motivation is not found in any of the possible sources thereof, and evidences the need for objective teachings, not Examiner speculation. *See In re Lee*, 277 F.3d at 1343-44, 61 U.S.P.Q.2d at 1434 (stating that the factual question of motivation is material to patentability and cannot be resolved on subjective belief and unknown authority). That the Examiner might advance a theory for retooling the references using the Application as a guide does not satisfy the requirements of a *prima facie* showing of obviousness. *See In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998) (citations omitted) (stating that using the application itself as a blueprint for piecing together elements in the prior art is an inappropriate process by which to determine patentability).

Thus, for at least the aforesaid reasons, claims 6, 17 and 28 are not *prima facie* obvious. Therefore, claims 6, 17 and 28 are allowable under 35 U.S.C. § 103 over *Williams* and *Threlkeld*.

Claim 7 recites the method of claim 6 wherein the first value signals that said job is available for scheduling. Claims 18 and 29 are respectively directed to a data processing system and computer program product that include circuitry and programming instructions paralleling the method steps of claim 7. The Examiner asserts that *Williams* teaches the limitation of claims 7, 18 and 29 in disclosing that the job is reentered in the queue when there is no error. (Paper No. 10, page 5.) In

fact, there is no discussion whatsoever in *Williams* with regarding actions in conjunction with an error. Indeed, the teaching referred to by the Examiner states that when the task completes execution, it is re-entered into the time-ordered queue and the cycle repeats, or if its execution time is longer than the time-interval for which the service manager is accepting tasks, it is discharged from memory. (*Williams*, col. 8, lines 29-35.) The Examiner cannot use *Williams'* silence as to errors, to engraft a condition of "no error" in conjunction with reentering the task into the queue. This, for at least the aforesaid reasons, neither *Williams*, *Threlkeld* nor the combination thereof teach or suggest all of the limitations of claims 7, 18 and 29.

The Examiner advances no further motivation to combine beyond that stated with respect to claims 6, 17 and 28. (*See* Paper No. 10, page 4.) For at least those reasons and the foregoing, a *prima facie* showing of obviousness has not been made with respect to claims 7, 18 and 29, and claims 7, 18 and 29 thus are allowable under 35 U.S.C. § 103 over *Williams* and *Threlkeld*.

With respect to claims 8, 19 and 30, *Williams* and *Threlkeld*, taken singly or in combination, do not teach or suggest "the step of retrying said steps of determining if a job is available for scheduling, determining if a session is available, and launching said session, in response to an error condition" as recited in claim 8 and similarly in claims 19 and 30. The Examiner directs Applicants' attention to column 8, lines 30-49 in Figure 7A of *Threlkeld* as teaching the above-cited claim limitation. (Paper No. 6, page 7, Paper No. 10, page 5.) Instead, *Threlkeld* states: upon the job being removed from the list at box 721 (FIG. 7B), a determination is made at decision box 723 as to whether the job ended in error. If there was no error, the job end date is set at box 725 before the job monitoring operation proceeds to decision box 714 (FIG. 7A). When an error is detected at decision box 723, a determination is made at decision box 727 regarding the ability to relaunch the job. Where the job cannot be relaunched, an error message is set at box 729 before the job monitoring operation proceeds to decision box 714 (FIG. 7A). If the job can be relaunched, a determination

is made at decision box 731 as to whether the job can be relaunched immediately. A determination that the job can be relaunched causes the job to be set for relaunching now at box 733, and the job monitoring operation proceeds to decision box 714 (FIG. 7A). A determination that the job cannot be relaunched immediately is followed by a determination at decision box 735 as to whether the job can be relaunched after a delay period. (*Threlkeld*, column 8, lines 30-49.)

Thus, *Threlkeld* teaches that a job may be relaunched under certain conditions. However, this language does not teach retrying the steps of determining if a job is available for scheduling, determining if a session if available, and launching the session, in response to an error condition. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 8, 19 and 30. MPEP §2143.

With respect to claims 9, 20 and 31, *Williams* and *Threlkeld,* taken singly or in combination, do not teach or suggest "wherein said step of retrying is repeated until a predetermined time interval has elapsed" as recited in claim 9 and similarly in claims 20 and 31. The Examiner directs Applicants' attention to column 8, lines 30-49 of *Threlkeld* as teaching the above-cited claim limitation. (Paper No. 6, page 8, Paper No. 10, page 6.) As noted above, *Threlkeld* teaches that a job may be relaunched under certain conditions. However, this language does not teach repeating the step of retrying the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session, in response to an error condition until a predetermined time interval has elapsed. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 9, 20 and 31. MPEP §2143.

A *prima facie* showing of obviousness requires the Examiner to establish, *inter alia,* that the prior art references teach or suggest, either alone or in combination, all of the limitations of the claimed invention, and the Examiner must provide a motivation or suggestion to combine or modify the prior art reference to

make the claimed inventions. MPEP § 2142. The motivation or suggestion to combine references must come from one of three possible sources: the nature of the problem to be solved, the teaching of the prior art and the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d. at 1458. The showings must be clear and particular. *In re Lee*, 277 F.3d at 1343, 61 U.S.P.Q.2d at 1433-34; *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d at 1317; *In re Dembiczak*, 50 U.S.P.Q.2d at 1617. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not evidence. *Id.*

In order to reject under 35 U.S.C. § 103, therefore, the Examiner must provide a proper motivation for combining or modifying the references. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457-1458 (Fed. Cir. 1998); MPEP § 2142. The Examiner's motivation for modifying *Williams* to retry the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session, to respond to an error condition, as recited in claims 8, 19 and 30, is "because this would allow a task to be completed if it is not completed the first time by relaunching *Williams*' whole process over again, thereby completing the requested task." (Paper No. 6, page 7, Paper No. 10, page 5.) Further, the Examiner's motivation for modifying *Williams* to repeat the step of retrying until a predetermined time interval has elapsed, as recited in claims 9, 20 and 31, is "because this would further allow tasks that could not be completed and relaunched the second time to attempt again at a later time when there might be less network congestion, for example." (Paper No. 6, page 8, Paper No. 10, page 6.)

There is no motivation to combine *Williams* with *Threlkeld*. In particular, there is no suggestion or motivation in either *Williams* or *Threlkeld*, or in their combination, in the knowledge of those ordinarily skilled in the art, to combine the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, with the teaching of processing recurrent information processing operations that

accommodate processing operations in more than one time zone, as taught in *Threlkeld*. *Williams* states: a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system is presented. All task requests that are scheduled to be executed within a pre-specified interval of time, are serviced according to their priority. 'During heavy load times, the scheduling governor prevents overloads of the processing resources of the host computer by limiting the number of concurrently executing scheduled tasks to a pre-specified capacity dimension. Task requests that are unable to be run due to the governed cap on the number of allowed concurrently executing processes are given a priority to be executed once one of the fixed number of execution slots becomes available. Accordingly, the scheduling governor allows each scheduled task to be executed as close to its scheduled time as possible yet prevents system resource overload to improve efficiency and performance. (*Williams*, Abstract.)

Thus, *Williams* teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system. *Threlkeld* states: briefly, the above and further objects of the present invention are realized by providing a new and improved system and method for processing recurrent information processing operations without requiring substantial input from a user, and which facilitates processing in more than one time zone. (*Threlkeld*, column 2, lines 12-18.)

Thus, *Threlkeld* teaches processing recurrent information processing operations that accommodate processing operations in more than one time zone.

The Examiner has not shown why the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, should be combined with the teaching of processing recurrent information processing operations that accommodate processing operations in more than one time zone, as taught in *Threlkeld*, from either the nature of the problem to be solved, the teaching in the prior art or the knowledge

of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d at 1458. The Examiner must submit objective evidence and not rely on his own subjective opinion for combining *Williams,* which teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system with *Threlkeld*, which teaches processing recurrent information processing operations that accommodate processing operations in more than one time zone. *In re Lee*, 61 U.S.P.Q.2d at 1434.

Moreover, the Examiner has not shown why *Williams* should be modified to retry the steps of determining if a job is available for scheduling, determining if a session is available and launching the session, in response to an error condition, from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q. 2d at 1458. Further, the Examiner has not shown why *Williams* should be modified to relaunch *Williams'* whole process over again if a task is not completed the first time from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *Id.* Further, the Examiner has not shown why *Williams* should be modified to repeat the step of retrying until a predetermined time interval has elapsed from either the nature of the problem to be solved, the teaching in the prior art of the knowledge of persons of ordinary skill in the art. *Id.* Further, the Examiner has not shown why *Williams* should be modified to repeat the relaunch sequence in *Williams'* system when there might be less network congestion from either the nature of the problem to be solved, the teaching in the prior art or the knowledge of persons of ordinary skill in the art. *Id.*

The Examiner must submit objective evidence and not rely on his own subjective opinion in support of modifying *Williams* to retry the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session, in response to an error condition. *In re Lee*, 61 U.S.P.Q.2d at 1434. Further, the Examiner must submit objective evidence and not rely on his own

subjective opinion in support of modifying *Williams* to relaunch *Williams'* whole process over again if the task is not completed the first time. *Id.* Further, the Examiner must submit objective evidence and not rely on his own subjective opinion in support of modifying *Williams* to repeat the step of retrying until a predetermined time interval has elapsed. *Id.* Further, the Examiner must submit objective evidence and not rely on his own subjective opinion in support of modifying *Williams* to repeat the relaunch sequence in *Williams'* system at a later time when there might be less network congestion. *Id.* Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 8-9, 19-20 and 30-31.

VI.   REJECTION UNDER 35 U.S.C. § 103

Claims 10, 11, 21, 22, 32 and 33 have been rejected under 35 U.S.C. § 103 as being unpatentable over *Williams* and *threlkeld* and in further view of *Hslasnik et al.*, U.S. Patent No. 5,925,096 (*"Hlasnik"*). The Applicants respectfully traverse the rejection of claims 10, 11, 21, 22, 32 and 33 under 35 U.S.C. § 103.

With respect to claims 10, 21 and 23, as noted above, in order to reject under 35 U.S.C. § 103, the Examiner must provide a proper motivation for combining or modifying the references. *In re Rouffet*, 47 U.S.P.Q.2d at 1457-1458; MPEP § 2142. The Examiner's motivation for modifying *Williams'* to register a callback method in response to an expiring of the predetermined time interval, as recited in claims 10, 21 and 32, is "because this would allow the client application to perform its function and then return control to *Williams'* host computer (target system) when the time does expire." (Paper No. 6, pages 8-9, Paper No. 10, pages 7-8.) Further, the Examiner's motivation for modifying *Williams* to perform the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session in response to an invoking of the callback method by a target system is because "this would allow the client application to perform its function and then return control to *Williams'* host computer (target system) when the time does expire,

19

and thus have the requested task be entered into the thread and be completed." (Paper No. 6, page 9; Paper No. 10, page 7.)

There is no motivation to combine *Williams*, *Threlkeld* and *Hlasnik*, as there is no suggestion or motivation in either *Williams*, *Threlkeld* or *Hlasnik*, or in their combination, or in the knowledge of those ordinarily skilled in the art, to combine the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, with the teaching of processing recurrent information processing operations that accommodate processing operations in more than one time zone, as taught in *Threlkeld*, with the teaching of providing a computer application with periodic preemptive access to system resources, as taught in *Hlasnik*. As stated above, *Williams* teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system. Further, as stated above, *Threlkeld* teaches processing recurrent information processing operations that accommodate processing operations in more than one time zone. Further, *Hlasnik* states:

An apparatus and method for controlling system resource access to a computer application program in an otherwise synchronous, non-preemptive operating environment. A periodic preemption mechanism (PPM) is used to provide periodic CPU access to a client application. Initially, the client application registers a callback address with the PPM. Subsequently, the PPM periodically initiates a preemptive event, upon which the PPM checks for certain critical conditions. If there are no critical conditions, then the PPM saves critical registers of the CPU, then calls the client application at its callback address. In response, the client application performs its function then returns control to the PPM. The PPM then restores the critical registers of the CPU and returns control to the application that was running when the preemptive event occurred. The PPM behaves in a manner in which the operating system is generally unaware of the preemption. *Hlasnik*, Abstract.

Thus, *Hlasnik* teaches providing a computer application with periodic preemptive access to system resources.

The Examiner has not shown why the teaching of a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over a network computer system, as taught in *Williams*, and the teaching of processing recurrent information processing operations that accommodate processing operations in more than one time zone, as taught in *Threlkeld*, should be combined with the teaching of a computer application with periodic preemptive access to system resources, as taught in *Hlasnik*, from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d at 1458. The Examiner must submit objective evidence for combining *Williams*, which teaches a scheduling governor that regulates the number of scheduled tasks that are executed concurrently over another computer system, with *Threlkeld*, which teaches processing recurring information processing operations that accommodate processing operations in more than one time zone, with *Hlasnik*, which teaches a computer application with periodic preemptive access to system resources. *In re Lee*, 61 U.S.P.Q.2d at 1434.

Moreover, the Examiner has not shown why *Williams* should be modified to register a callback method in response to an expiry of the predetermined time interval, from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d at 1458. Further, the Examiner has not shown why *Williams* should be modified to allow a client application to perform its function and then return control to *Williams'* host computer when the time does expire from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *Id*. Further, the Examiner has not shown why *Williams* should be modified to form the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session in response to invoking of the callback

method by a target system from either the nature of the problem to be solved, the teaching of the prior art or the knowledge of persons of ordinary skill in the art. *Id.*

The Examiner must submit objective evidence and not rely on his own subjective opinion in support of modifying *Williams* to register a callback method in response to an expiry of the predetermined time interval. *In re Lee*, 61 U.S.P.Q.2d at 1434. Further, the Examiner must submit objective evidence and not rely on his own subjective opinion in support of modifying *Williams* to allow a client application to perform its function and then return control to *Williams'* host computer when the time does expire. *Id.* Further, the Examiner must submit objective evidence and not rely on his own subjective opinion in support of modifying *Williams* to perform the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session in response to invoking of the callback method by a target system. *Id.* Therefore, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 10-11, 21-22 and 32-33.

Williams, Threlkeld, and *Hlasnik*, taken singly or in combination, do not teach or suggest "registering a callback method in response to an expiry of said predetermined time interval" as recited in claim 10 and similarly in claims 21 and 32. The Examiner directs Applicants' attention to the Abstract, column 6, lines 48-55 and column 6, line 62 to column 7, line 10 of *Hlasnik* as teaching the above-cited claim limitation. (Paper No. 6, page 8; Paper No. 10, page 6.) Rather, *Hlasnik* states: the PPM 460 includes a saving means 461, a control transfer means 462, a restoring means 463, *a callback registration means 464*, and a disabling means 465. The saving means 461 is for saving the state of the computing environment. This can include hardware and software used to save the registers of the processor and other state information. The control transfer means 462 is for transferring control to a client application. The restoring means 463 is for restoring the state of the computing environment and can include hardware and software used to restore the registers of the processor and other state information. The callback registration means 464 is for

registering a callback address. For example, this could be a register, or it could be some instructions which store the callback address to memory. The disabling means 465 is for selectively disabling the PPM 460 from preempting a client application. (*Hlasnik*, column 6, line 62 to Column 7, line 10).

Thus, *Hlasnik* teaches callback registration means for registering a callback address. The callback address may be used by a periodic preemption mechanism to call the client application. This language does not teach registering a callback method in response to an expiry of the predetermined time interval. Accordingly, the Examiner has not presented a *prima facie* case of obviousness for rejecting claims 10, 21 and 32. MPEP §2143.

With respect to claims 11, 22 and 33, *Williams*, *Threlkeld* and *Hlasnik*, taken singly or in combination, do not teach or suggest "wherein said steps of determining if a job is available for scheduling, determining if a session is available, and launching said session, performed in response to invoking of said callback method by a target system, said target system for execution of said job" as recited in claim 11 and similarly in claims 22 and 33. The Examiner directs Applicants' attention to the Abstract, column 6, lines 48-55 and column 6, line 62 to column 7, line 10 of *Hlasnik* as teaching the above-cited claim limitation. (Paper No. 6, page 9; Paper No 10, page 7.) Instead, as stated above, *Hlasnik* teaches registering a callback address which may be used by a periodic preemptive mechanism to call the client application at its callback address. The callback address taught in *Hlasnik* is essentially used as a pointer to an address. Thus, *Hlasnik* does not teach invoking a callback method by a target system. Further, *Williams*, *Threlkeld* and *Hlasnik*, do not teach or suggest the steps of determining if a job is available for scheduling, determining if a session is available, and launching the session are performed in response to an invoking of the callback method by a target system. Further, *Williams*, *Threlkeld* and *Hlasnik*, do not teach or suggest a target system for execution of the job. Accordingly, the Examiner

has not presented a *prima facie* case of obviousness for rejecting claims 11, 22 and 33. MPEP §2143.

VII.   RESPONSE TO ARGUMENTS

The Examiner states that the Applicants' arguments filed in the Applicants' Reply under 37 C.F.R. § 1.111, mailed June 19, 2003 (the "Applicants Second Reply") have been fully considered but are deemed unpersuasive.

As discussed in the Applicants' Second Reply, and hereinabove, *Williams* does not teach, at least, determining if a session is available, nor determining if a session is available in response to determining if a job is available. Neither does *Williams* teach a session including a pool of sessions having a preselected one of a set of priority levels. The Examiner responds that *Williams* clearly discloses the use of discovering and available execution entry for a discovered task request having been entered into a priority ordered queue for the execution of the task. (Paper No. 10, page 8.) The Applicants, as an initial matter, respectfully disagree that *Williams* teaches that a solicitor function locates and queues task requests into a priority ordered queue in which the only task requests that are accepted are those due within a specified time interval. (*Williams*, column 2, lines 44-50.) Task requests discovered by the solicitor function to be scheduled within a pre-specified time interval are entered into the priority-ordered queue in sorted time order. (*Williams*, column 2, lines 52-55.) Tasks are transferred from the priority-ordered queue to an in-service queue on a first-in and first-out basis. (*Williams*, column 2, lines 58-60.) When any execution entry in the in-service queue is empty, the highest priority task request from the priority-ordered queue is transferred to the available execution entry in the in-service queue and execution of the task request beings. (*Williams*, column 2, line 63 through column 3, line 2.) Thus, the first available in-service queue entry is used. Additionally, the Examiner's own statement of the teaching in *Williams* does not disclose determining if a session is available in response to determining if a job is available for scheduling, and wherein the session is included in a pool of sessions having a preselected one of a

set of priority levels corresponding to the priority level of the job. Thus, the Examiner's own assertions are self-refuting with respect to the anticipation of claim 1 by *Williams*. Note further that the teaching in *Williams* stating that the first available queue entry is used plainly shows that the in-service queue entries do not have a preselected priority level. Therefore, for at least this reason, they do not teach a session as recited in claims 1, 12 and 23.

Claims 1, 12 and 23 as discussed in the Applicants' Second Reply and hereinabove, also include launching the session to affect the execution of the job, if the session is available. In response to the Applicants argument that *Williams'* disclosure with respect to transferring the highest priority task request from a priority-ordered queue to the in-service queue and commences an execution of the task does not teach launching a session, the Examiner responds that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art to patentably distinguish the claimed invention from the prior art. (Paper No. 10, page 4) (citing *In re Otto* and *In re Casey*). The Applicants note that claim 1 is a method claim. The limitation in claim 1 with respect to launching the session is not a statement of an intended use of a claimed invention. Furthermore, the claim is not a claim drawn to a process of making. In the aforementioned teleconference with the Examiner, the Applicants' attorney requested clarification as to the application of *In re Casey* and *In re Otto*. The Examiner responded that the Applicants argued that *Williams* was performing a different operation from the invention of claim 1 (and likewise, claims 12 and 23), and that the operation would not matter unless there were different structure. The Applicants respectfully disagree. Neither *In re Casey* nor *In re Otto* stand for the proposition that a method claim having different operations compared to the reference must recite different structure. *In re Otto* was directed to claims for an apparatus, and a method of making the apparatus. (*In re Otto*, 312 F. 2d 937, 939 (C.C.P.A. 1963). With respect to the method of making the apparatus, there is no holding in *In re Otto* that states that the operations of a method claim do not matter unless they give rise to

different structure. On the contrary, *In re Otto* considered claims directed to an apparatus and a method of making the apparatus and stated that limitations directed to the use of the apparatus were not relevant to the patentability of the claims. *In re Otto*, 312 F. 2d at 939. Also, note that, with respect to a computer program product on a tangible storage medium including programming instructions for performing a method distinct from that taught in a reference, and likewise for a data processing circuitry for performing operations of the method. These are structural differences. For example, the optical pits on a CD-ROM, or the magnetic domains on a magnetic storage device are differences in structure. Neither does *In re Casey* stand for the proposition that operational differences do not give rise to patentable distinctions unless there is a structural difference between the claimed invention and the reference. The teaching in *In re Casey* was directed to the statement of use in a preamble. *In re Casey*, 370 F. 2d 576, 579 (C.C.P.A. 1967). The limitations at issue with respect to the Examiner's response is not a statement of use in the preamble of the claim. Thus, the Examiner's response with respect to the step of launching the session does not address the Applicants showings in the Applicants' Second Reply and hereinabove.

Moreover, a priority-ordered queue entry is not launchable. Therefore, for at least this reason, a priority-ordered queue entry does not teach a session as recited in claims 1, 12 and 23.

Anticipation requires that a single prior art reference teach all of the claim limitations arranged as required by the claim. MPEP § 2131. Plainly, *Williams* does not teach all of the limitations of claims 1, 12 and 23.

With respect to the limitation in claim 2, reciting sessions comprising a thread, the Examiner responds that *Williams* discloses using threads to schedule task requests wherein the task requests are executed with a queued 'session' thus comprising a thread. The Examiner's response does not demonstrate that *Williams* discloses a session comprising a thread. Whether *Williams* discloses using threads to schedule a

task or not, this says nothing about the disclosure of a session comprising a thread. Moreover, the Examiner's assertion that task requests are executed within a queued 'session' is simply engrafting sessions into the teaching of *Williams*. *Williams* does not disclose sessions as recited in, *inter alia*, claim 2. *Williams* teaches that task requests are executed in a in-service queue. *Williams* does not disclose "sessions" or "queued sessions." Consequently, the Examiner's response does not refute the Applicants' showing that *Williams* does not anticipate claim 2 and likewise, claims 13 and 24 directed, respectively to a computer product and data processing system for performing operations paralleling the method of claim 2.

With respect to the limitations in claims 3, 14, and 25 drawn to creating a connection to a target system for the execution of the job, the Examiner asserts that the Applicants arguments fail to comply with 37 C.F.R. § 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the reference. The Examiner's assertion is erroneous on its face. The Applicants specifically addressed the teaching in *Williams* asserted by the Examiner to disclose the limitations of claim 3, 14 and 25. (*See* Applicants' Second Reply, pages 17-18.) The Examiner has not addressed the Applicants' showings with respect to the teachings of *Williams* but simply reiterates the allegation that the teaching in *Williams* disclosing a dispatcher client object making method calls on a method server_socket on the scheduler of *Williams* teaches the limitation in claims 3, 14 and 25 of creating a connection to a target system for the execution of the job. (Paper No. 10, page 9.) The Examiner provides no objective evidence to support this allegation. Furthermore, *Williams* explicitly teaches that as the dispatcher client objects make method calls on method server_socket of the scheduler, they are serviced by dispatched thread to perform the actual query in a thread within the schedule. Recall that task requests are executed when transferred to an execution entry in the in-service queue. The in-service queue is not a component of the scheduler, or dispatcher client. (*See Williams*, FIGURE 5.) The Examiner's response

27

to the Applicants' showings with respect to claims 3, 14 and 25 do not refute the Applicants' showings that *Williams* does not anticipate claim 3, 14 and 25.

With respect to the step of launching an error handling thread in response to an error condition, the error handling thread releasing the session, as recited in claims 5, 16 and 27, the Examiner asserts that the Applicants arguments fail to comply with 37 C.F.R. § 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Again, the Examiner's assertion is incorrect on its face. (*See* the Applicants' Second Reply, pages 18-19.) The Examiner simply repeats the Examiner's allegation that the teaching in *Williams* disclosing that upon completion of the execution of a task request, if the task request's next execution time does not exceed the pre-specified time interval of the scheduler, the task request is discharged from the memory. (*See* Paper No. 10, page 9.) Furthermore, the Examiner improperly "interprets" the next execution time exceeding the pre-specified time interval as an error. There is no such teaching in *Williams*, and the Examiner is not free to embellish the disclosure in *Williams*. On the contrary, *Williams* teaches that if the next execution time exceeds this pre-specified time interval, the test request is discharged from memory and its lifecycle completes. (*Williams*, column 3, lines 7-9.) The Examiner is not free to reinterpret *Williams* to define the completion of a lifecycle as an error. Moreover, the Examiner has identified nothing in *Williams*, and there is no such teaching in *Williams* that discloses launching an error handling thread in response to an error condition regardless of how *Williams* is "reinterpreted." Furthermore, there is nothing in *Williams*, nor would such a teaching be expected in *Williams* that such an error handling thread releases a session. The Examiner has interpreted the in-service queue entries as a "session", and although such an interpretation is improper, *Williams* cannot teach the error handling thread releasing a session because the alleged error condition by the Examiner only occurs after the task request has completed execution. (*See Williams*, column 3, lines 28-29.) Consequently, the Examiner's assertions do

not refute the Applicants' showings that *Williams* fails to anticipate claims 5, 16 and 27. Because *Williams* does not teach all of the limitations of claims 5, 16 and 27, claims 5, 16 and 27 are allowable under 35 U.S.C. § 102 over *Williams*.

With respect to the limitation of retrying the steps of determining if a job is available for scheduling, determining if a session is available and launching the session in response to an error condition as recited in claims 8, 19 and 30, the Examiner responds that *Williams* discloses all of the limitations of claims 8, 19 and 30 but for the steps being repeated on condition of there being an error, and *Threlkeld* is simply used for disclosing a well-known procedure of relaunching a task or job due to an error. (Paper No. 9, page 10.) As an initial matter, the Applicants traverse the statement that the procedure of relaunching a task or job due to an error is well-known and respectfully request the Examiner to provide evidence in support thereof. *See* MPEP § 2144.03. Moreover, assuming for the sake of argument, that *Threlkeld* teaches a procedure of relaunching a task or job due to an error, as alleged by the Examiner, the allegation is too broad. The limitations in claims 8, 19 and 30 do not simply state relaunching a task or job due to an error. The Examiner has to provide some rationale for combining the teachings of *Williams* and *Threlkeld* which combination modifies *Williams* to make the invention of claims 8 (and claims 19 and 30). The Examiner states that because *Williams* and *Threlkeld* disclose performing tasks and performance with respect to an error executing a task, it would have been obvious to use *Threlkeld's* technique of relaunching tasks due to error to effect the tasks. The Examiner provides no objective evidence in support of this allegation. Moreover, as the Applicants have previously discussed, there is no teaching in *Williams* whatsoever with respect to error conditions. The Examiner has "reinterpreted" *Williams'* teaching with respect to the end of a lifecycle as an "error." Such a motivation for modifying or combining the references to make the claimed inventions is not sufficient to sustain a *prima facie* showing of obviousness. A motivation or suggestion must be supported by objective evidence, namely teaching in the references themselves, the nature of the problem to be solved or the knowledge

of persons of persons of ordinary skill in the art. MPEP § 2143.01. Moreover, the teachings must be clear and particular, and in broad conclusory statements regarding the teachings of the references without more is not evidence. *In re Lee*, 277 F. 3d, 1338, 1343, 61 U.S.P.Q. 2d 1430, 1433-34 (Fed. Cir. 2002); *In re Kotzab*, 217 F. 3d 1365, 1370, 55 U.S.P.Q. 2d 1313, 1317 (Fed. Cir. 2000); *In re Dembiczak*, 175 F. 3d 994, 999, 50 U.S.P.Q. 2d 1614, 1616-17 (Fed. Cir. 1999). Consequently, for at least the aforesaid reasons, the Examiner's response is not sufficient to rebut the Applicants showings of a failure to establish a *prima facie* showing of obviousness with respect to claims 8, 19 and 30. Therefore, claims 8, 19 and 30 are allowable under 35 C.F.R. § 103 over *Williams* and *Threlkeld*.

With respect to the limitation of claim 9, 20 and 31 in which the step of retrying, as recited in claim 8, is repeated until a predetermined time interval has elapsed, the Examiner asserts that *Threlkeld* discloses the job being relaunched immediately if possible, and if not, relaunched after a delay period and thus after a time interval has elapsed. (Paper No. 9, page 10.) Assuming, for the sake of argument, that the Examiner's statement as to the teaching in *Threlkeld* is correct, it fails to disclose the limitation of repeatedly retrying until a predetermined time interval has elapsed. In fact, it teaches precisely the opposite. The teaching, as asserted by the Examiner, states relaunching after a time interval has elapsed, not retrying until a predetermined interval has elapsed. Thus, *Williams* and *Threlkeld*, alone or in combination, do not teach or suggest all of the limitations of claims 9, 20 and 31. Neither has a motivation or suggestion for modifying or combining the references to make the inventions of claims 9, 20 and 31 upon which a *prima facie* showing of obviousness may be predicated been provided. The Examiner has not rebutted the Applications' showings that *Williams* and *Threlkeld* to not demonstrate a *prima facie* showing of obviousness of claims 9, 20 and 31. Therefore, claims 9, 20 and 31 are allowable under 35 C.F.R. § 103 over *Williams* and *Threlkeld*.

With respect to the limitation of claims 10, 21 and 32 directed to the step of registering a callback method in response to an expiry of the predetermined time interval (as recited in claim 9), the Examiner asserts that *Williams* and *Threlkeld* teach all of the limitations of claims 10, 21 and 32 but for the registration of a callback method. (Paper No. 10, page 11.) Although, for the reasons discussed in the Applicants' Second Reply and hereinabove, the Applicants respectfully disagree that *Williams* and *Threlkeld* teach all of the limitations of claim 10 but for the registration of a callback method, the Examiner's reliance on *Hlasnik* as disclosing the well known use of a callback method being registered is misplaced. As an initial matter, the Applicants respectfully traverse the Examiner's allegation that it is well known to use a callback method being registered and respectfully request the Examiner to provide objective evidence in support thereof. MPEP § 2144.03. The assertion that it is well known to use a callback method being registered without context is meaningless. Therefore, an Examiner must provide objective evidence to demonstrate the contrary. Indeed, *Hlasnik* itself refutes the Examiner's assertions as *Hlasnik* is directed to registering a callback address to preempt execution of an application in a processor by a preempting application. (*Hlasnik*, column 2, lines 38-54.) The Examiner provides no explanation why a person of ordinary skill in the art would look to the registration of a callback address to initiate the preemption of the execution of an application by a preempting application to address the problem addressed by the invention of claims 10, 21 and 32, namely the unreachability of a target endpoint system. Indeed, while the Examiner states that the Specification broadly refers to the job state being set to "unreachable", and a login callback method is registered with the gateway of the target endpoint system, reference to the Specification is neither necessary nor proper to interpret the teaching of the reference. *Hlasnik* simply does not disclose registering a callback method in response to the expiry of the predetermined time interval. On the contrary, *Hlasnik* explicitly teaches registering a callback address by an interrupting application to initialize a preemption mechanism. (*Hlasnik*, column 2, lines 43-45.) That teaching does not disclose or suggest the limitation of claims 10, 21 and 32. Thus, the Examiner's response to the

Applicants' showings do not establish that *Williams*, *Threlkeld* and *Hlasnik*, alone or in combination, teach or suggest all of the limitations of claim 10, 21 and 21.

With respect to a motivation for combining or modifying the references, the Examiner asserts that one would have been motivated to use *Hlasnik's* system as *Hlasnik* states that the client application can perform its function and return control to the host system as this would allow the combination to continue processing the queue and not terminate the other tasks scheduled in the queue because the host system will not have control via simply invoking a callback method. As previously discussed, *Hlasnik* is drawn to systems and methods for preemptively interrupting the execution of an application by another application. There is nothing that *Hlasnik* discloses or suggests that this would allow *Williams* to continue processing the queue and not terminate the other tasks scheduled in the queue. Indeed, there is nothing in *Williams* that suggests that tasks in the queue are terminated. On the contrary, *Williams* discloses that execution of the task commences, and when it is complete it is removed from the in-service queue. (*Williams*, column 3, lines 25-29.) Nothing in the teaching of the references themselves or in the knowledge of persons of ordinary skill in the art as identified by the Examiner that suggested desirability of incorporating a callback address registration as taught in *Hlasnik* into the task scheduling mechanism of *Williams*. Moreover, there is no reasonable expectation of success in modifying the references to make the claimed invention found in the references themselves. A *prima facie* showing of obviousness requires that the Examiner identify such expectation of success in the teachings themselves. MPEP § 2143. The Examiner's response underscores the necessity for an objective showing of a motivation or suggestion to combine or modify references to make the claimed invention. Broad conclusory statements regarding the teachings of the references without more, are not evidence. *In re Lee*, 277 F. 3d at 1343, 61 U.S.P.Q. 2d at 1433-34; *In re Kotzab*, 217 F. 3d at 1370, 55 U.S.P.Q. 2d at 1317; *In re Dembiczak*, 175 F. 3d at 999, 50 U.S.P.Q. 2d at 1616-17.

Consequently, for at least these reasons, the Examiner's response to the Applicants' showings in the Applicants Second Reply and hereinabove, do not refute the Applicants showings and thus, claims 10-21 and 32 are allowable under 35 U.S.C. § 103 as not being *prima facie* obvious in view of *Williams*, *Threlkeld* and *Hlasnik*.

With respect to the limitations in claims 11, 22 and 33 in which the steps of determining if a job is available for scheduling, determining if a session is available and launching the session are performed in response to an invoking of the callback method by a target system, the target system for execution of the job. As an initial matter, the Examiner asked the Applicants for clarification in the Specification on how the callback method is to invoke the processes. The Applicants attorney and the Examiner discussed this in the aforementioned telephonic interview as the Applicants were unsure as to the Examiner's request. The Applicants would refer the Examiner to FIGURE 3C which indicates that the retry thread depicted therein proceeds from block 390 to decision block 379. If in decision block 379 the state is unreachable (note that in step 390, it is set to unreachable) decision block 379 falls through its "yes" branch and in block 381 the process waits until the endpoint logs in. When the retry thread breaks out of decision block 381, it proceeds to block 385 which returns to thread 300 illustrated in FIGURE 3A which includes determining if a job is available, determining if a session is available and launching the session.

With respect to the rejection of claims 11, 22 and 33, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of *Hlasnik's* responding to an expiry of an elapsed time into *Williams'* system because this would allow the client application to perform its function and then return control to *Williams'* host computer when the time does expire and thus have the requested task be queried into the thread to be completed. As previously discussed, *Hlasnik* does not teach responding to an expiry of an elapsed time. *Hlasnik* is directed to a preemptive interrupt mechanism whereby a client

33

application registers by providing a callback address to initialize the preemption mechanism. (*Hlasnik*, column 2, lines 42-44.) There is nothing in either *Hlasnik* nor *Williams* that suggests that the client application in *Hlasnik* has anything to do with the scheduling of tasks as taught by *Williams*. Again, this allegation as to a motivation for combining the teachings of the reference, evidences the necessity of providing objective teaching that suggests the desirability of making the claimed invention. The Examiner has presented no objective evidence to suggest combining *Williams* and *Hlasnik* to make the invention of claims 11, 22 and 33. There is no such motivation. A motivation is an *ad hoc* combination of the teachings of the references to make the inventions of claims 11, 22, and 33 using the teachings of the Application as a blueprint for piecing together elements in the references. This is an inappropriate approach for determining patentability of the claimed inventions. *In re Rouffet*, 149 F. 3d 1350, 1357, 47 U.S.P.Q. 2d, 1453, 1457 (Fed. Cir. 1998). Thus, it is required that objective evidence of a motivation or suggestion to modify or combine the references be provided and broad conclusory statements regarding the teachings of the references without more are not evidence. *In re Rouffet*, 145 F.3d at 1357, 47 U.S.P.Q. 2d at 1457-58; *In re Lee*, 277 F. 3d at 1338, U.S.P.Q. 2d at 1433-34; *In re Kotzab*, 217 F. 3d at 1370, 55 U.S.P.Q. 2d at 1317; *In re Dembiczak*, 175 F. 3d at 999; U.S.P.Q. 2d at 1616-17. Thus, the Examiner's response to the Applicants showings in the Applicants' Second Reply and hereinabove do not refute the Applicants' demonstration that claims 11, 22 and 33 are not *prima facie* obvious and thus allowable under 35 U.S.C. § 103 over *Williams*, *Threlkeld*, and *Hlasnik*.
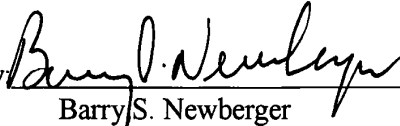
VIII. CONCLUSION

As a result of the foregoing, it is asserted by Applicants that claims 1-33 in the Application are in condition for allowance, and Applicants respectfully request an allowance of such claims. Applicants respectfully request that the Examiner call Applicants' attorney at the below listed number if the Examiner believes that such a discussion would be helpful in resolving any remaining issues.

Respectfully submitted,

WINSTEAD SECHREST & MINICK P.C.

Attorneys for Applicants

By

Barry S. Newberger
Reg. No. 41,527

PO. Box 50784
1201 Main Street
Dallas, Texas 75250-0784
(512)370-2808

AUSTIN_1\236967\1
7047-P348US